TABLE No. I.

Weight and composition of juice and jaggory (or massecuite) obtained from sugarcane plots. Plot I.

Rows	Pan	Juice					Jaggory or Massecuite				
		Weight	Sucrose		Glucose		Weight	Sucrose		Glucose	
		lbs	%	Total weight lbs	%	Total weight lbs	lbs	%	Total weight lbs	%	Total weight lbs
1 & ½ of 2	...	249	19·85	49·43	·30	0·747	49	85·20	41·75	3·80	1·86
4,3 & ½ of 2	...	367	20·75	76·20	·28	1·028	74¾	82·40	61·59	6·41	4·79
5,6 & ½ of 7	...	438¾	21·15	92·35	·46	2·108	102¼	68·70	70·24	13·70	14·00
½ of 7 & ½ of 8	Cut for seed and other purposes.										
9 & ½ of 8	...	227¼	20·20	45·90	·48	1·091	49½	77·40	38·31	8·20	1·06
10,11 & ½ of 12 ...	1	231½	20·50	57·71	·29	0·816	56¼	88·50	49·78	1·85	1·04
	2	262	20·50	53·71	·26	0·681	53	88·40	46·85	2·16	1·14
13 & ½ of 12	...	318¾	20·40	65·03	·31	0·988	67½	87·00	58·72	1·88	1·27
Total ...	...	2144½	...	440·33	...	7·459	452¼	...	367·24	...	28·16
Average ...	...	...	20·54	...	0·35	...	...	81·20	...	6·23	...

Weight and composition of juice and jaggory (or massecuite) obtained from sugarcane plots. Plot II.

1 & ½ of 2	...	256	20·55	52·62	·18	·460	49	85·50	41·89	4·62	2·26
3,4 & ½ of 2	1	248¾	20·45	50·77	·34	·844	50	83·10	41·55	5·81	2·90
	2	196½	20·25	39·79	·41	·805	38¾	85·45	33·11	5·95	2·30
5,6 & ½ of 7*	1	343	21·25	72.89	·31	1·063	81¼	71·80	58·34	7·24	5·88
	2	272	21·15	57·53	·29	·789	60½	73·40	44·41	8·77	5·31
½ of 7 & ½ of 8	Used for seed and other purposes.										
9 & ½ of 8	...	272	19·75	53·72	·32	·870	49	80·50	39·45	9·43	4·62
10,11 & ½ of 12 ...	1	296¼	20.80	61·62	·24	·711	62	86·50	53·63	3·08	1·91
	2	206½	20·85	43·00	·24	·495	38½	86·80	33·42	5·26	2·03
13 & ½ of 12	...	414	19·95	82·59	·29	1·200	77	85·10	65·53	3·18	2·45
Total ...	...	2504¼	...	514·53	...	7·237	506	...	411·33	...	29·66
Average ...	...	...	20·55	...	·29	...	...	81·29	...	5·86	...

* 11 lbs of juice used for other experiments.

TABLE No. I—*contd.*

Weight and composition of juice and jaggory (or massecuite) obtained from sugarcane plots. Plot III.

Rows	Pan	Juice					Jaggory or massecuite				
		Weight	Sucrose		Glucose		Weight	Sucrose		Glucose	
		lbs	%	Total weight lbs	%	Total weight lbs	lbs	%	Total weight lbs	%	Total weight lbs
1 & ½ of 2 ...	...	305½	20·15	61·50	·18	0·549	68¾	83·20	53·04	4·90	3·12
3, 4 & ½ of 2 ...	1	242½	20·45	49·59	·37	0·897	46¼	83·00	38·39	7·57	3·50
	2	244¼	20·50	50·07	·28	0·684	49¾	83·00	41·29	6·58	3·27
5, 6 & ½ of 7 ...	1	436	20·85	90·91	·40	1·744	105	67·85	71·24	12·50	13·12
	2	295½	20·75	61·26	·57	1·478	68¾	75·10	51·63	6·94	4·77
½ of 7 & ½ of 8 ...	...	Used for seed and other purposes.									
9 & ½ of 8 ...	...	401	19·70	79·00	·77	3·088	82½	75·50	62·29	9·26	7·64
10, 11 & ½ of 12 ...	1	290½	20·15	58·53	·33	0·958	61½	86·10	52·74	3·24	1·98
	2	320¾	20·10	64·47	·41	1·315	66¾	86·00	57·40	3·16	2·11
	3	385¾	20·35	78·50	·32	1·234	81¾	85·50	69·90	4·00	3·27
13 & ½ of 12 ...	1	236	20·05	47·32	·32	0·755	47	87·40	41·08	3·84	1·80
	2	217¾	19·75	43·00	·37	0·806	35¾	87·10	31·14	3·37	1·20
Total ...	...	3375	...	684·15	...	13·508	708½	...	570·14	...	45·78
Average ...	...	...	20·27	...	0·40	...	...	80·47	...	6·46	...

Weight and composition of juice and jaggory (or massecuite) obtained from sugarcane plots. Plot. IV.

1 & ½ of 2 ...	...	389	20·35	79·16	·22	0·856	81½	82·60	67·23	3·40	2·77
3, 4 & ½ of 2 ...	1	448	20·80	93·14	·35	1·568	88	80·20	70·58	9·10	8·01
	2	238	20·50	48·79	·43	1·023	43½	80·10	34·84	5·20	2·26
5, 6 & ½ of 7 ...	1	365¼	21·10	77·07	·47	1·716	82	76·30	62·57	8·33	6·83
	2	351	20·85	73·18	·53	1·860	81¾	75.20	61·48	9·09	7.43
½ of 7 & ½ of 8 ...	...	Used for seed and other purposes.									
9 & ½ of 8 ...	...	395¾	19·55	77·27	·65	2·569	88¾	62·65	55·60	18·70	16·60
10, 11 & of ½ 12 ...	1	403½	20·65	83·27	·34	1·371	84½	84·70	71·57	5·26	4·44
	2	408	20·05	81·80	·36	1·468	85¾	85·90	73·66	4·38	3·76
13 & ½ of 12 ...	1	263¾	20·25	53·31	·36	0·947	52¾	85·20	44·94	5·20	2·74
	2	258	20·45	52·76	·32	0·826	55½	85·10	47·23	4·09	2·27
Total ...	...	3519	...	719·75	...	14·204	744	...	589·70	...	57·11
Average ...	...	...	20·45	...	0·42	...	...	79·26	...	7·68	...

TABLE NO. I—*contd.*

Weight and composition of juice and jaggory (or massecuite) obtained from sugarcane plots. Plot V.

Rows	Pan	Juice					Jaggory or massecuite				
		Weight	Sucrose		Glucose		Weight	Sucrose		Glucose	
		lbs	%	Total weight lbs	%	Total weight lbs	lbs	%	Total weight lbs	%	Total weight lbs
1 and ½ of 2	...	253	20·10	50·85	·23	0·581	53½	85·80	45·90	4·71	2·52
3, 4 and ½ of 2	1	275¾	20·95	57·77	·23	0·634	53½	83·70	44·78	6·17	3·30
	2	204	20·75	42·33	·29	0·592	37¾	86·60	32·69	4·54	1·71
5, 6 and ½ of 7	1	378¾	20·35	77·08	·50	1·894	76	79·20	60·19	8·77	6·66
	2	281¼	20·60	57·99	·58	1·633	58¼	84·20	49·05	5·61	3·27
½ of 7 and ½ of 8	...	Used for seed and other purposes.									
9 and ½ of 8		369	19·95	73·62	1·22	4·502	78	74·00	57·72	12·60	9·83
10, 11 and ½ of 12	1	388½	20·75	80·61	·47	1·826	79½	85·70	68·35	4·38	3·49
	2	354	20·85	71·72	·39	1·341	75	85·50	64·12	3·90	2·93
13 and ½ of 12	...	463½	20·15	93·40	·30	1·390	95	81·10	77·04	5·81	5·52
Total ...	...	2,968	...	605·37	...	14·393	606¾	...	499·84	...	39·23
Average ...	...	...	20·40	...	0·48	...	...	82·38	...	6·47	...

Weight and composition of juice and jaggory (or massecuite) obtained from sugarcane plots. Plot VI.

1 and ½ of 2	...	344½	20·30	69·93	·24	0·827	70½	86·40	60·91	3·30	2·33
3, 4 and ½ of 2	1	289¾	20·50	59·40	·32	0·927	60¼	83·50	50·31	5·88	3·54
	2	333¾	20·50	68·42	·33	1·101	68	83·90	57·05	5·88	4·00
5, 6 and ½ of 7	1	370½	21·00	77·80	·31	1·149	73½	84·00	61·74	5·50	4·04
	2	247½	20·75	51·36	·46	1·138	46½	84·30	39·20	6·09	2·83
½ of 7 and ½ of 8	...	Used for seed and other purposes.									
9 and ½ of 8	...	382¾	19·70	75·40	·85	3·253	83	60·00	49·80	23·81	19·76
10, 11 and ½ of 12	1	409	20·40	83·44	·36	1·472	83½	85·70	71·56	5·00	4·17
	2	326½	20·25	66·12	·36	1·175	69	84·70	58·44	5·26	3·63
13 and ½ of 12	...	391¾	19·35	75·80	·51	1·998	80	87·10	69·68	4·95	3·96
Total ...	...	3,096	..	627·67	....	13·040	634½	...	518·69	...	48·26
Average ...	...	...	20·27	....	0·42	...	...	81·78	...	7·61	...

TABLE No. I.—*contd.*

Weight and composition of juice and jaggory (or massecuite) obtained from sugarcane plots. Plot VII.

Rows	Pan	Juice					Jaggory or massecuite				
		Weight	Sucrose		Glucose		Weight	Sucrose		Glucose	
		lbs.	%	Total Weight lbs.	%	Total Weight lbs.	lbs.	%	Total Weight lbs.	%	Total Weight lbs.
1 & ½ of 2 ...	1	282½	19·85	56·08	·58	1·638	55¼	84·95	46·93	3·50	1·93
	2	199½	20·25	40·40	·63	1·257	33½	84·60	32·57	4·27	1·64
3, 4 & ½ of 2 ...	1	296¼	20·55	60·88	·64	1·896	61¼	85·80	52·55	4·90	3·00
	2	294¾	20·55	60·57	·71	2·093	63½	83·50	53·02	7·04	4·47
5, 6 & ½ of 7* ...		414¾	20·50	85·02	·84	3·484	87¾	80·20	70·38	8·93	7·75
9 & ½ of 8* ...		215¾	19·75	42·61	1·85	2·913	47½	72·65	34·51	11·90	5·65
5 to 9† ...		264½	16·10	42·58	2·16	5·713	41	72·70	29·81	13·50	5·54
10, 11 & ½ of 12 ...	1	400	21·00	84·00	·64	2·560	89	83·40	74·23	7·24	4·44
	2	285¾	20·95	59·86	·65	1·857	63¾	85·10	53·83	5·74	3·63
1 & ½ of 12 ...	1	255¾	19·25	49·23	·57	1·458	44¼	85·70	38·35	4·34	1·94
	2	259	19·85	51·41	·54	1·399	50½	86·75	43·81	3·70	1·87
½ of 7 & ½ of 8 ...		...			Used for seed and other purposes.						
Total ...	...	3168¾		632·64	...	26·268	642½	...	529·99	...	41·86
Average ...	...	...	19·97	...	0·83	...	...	82·52	...	6·52	...

* Except 2sft. which lodged.

† last 28t. lodged.

Weight and composition of juice and jaggory (or massecuite) obtained from sugarcane plots. Plot. VIII.

1 & of 2 ...	1	254½	19·50	49·63	·49	1·25	51½	85·50	44·03	4·55	2·34
	2	233	19·90	46·37	·46	1·07	44	86·40	38·02	4·23	1·86
3, 4 & ½ of 2 ...	1	298¼	20·55	61·29	·44	1·31	63¾	85·20	54·31	4·46	2·84
	2	319½	20·95	66·97	·49	1·57	68¾	85·70	58·92	4·34	2·98
5, 6 & ½ of 7 ...	1	371¼	20·50	76·09	·67	2·49	80	76·60	61·28	10·50	8·64
	2	272¼	20·60	56·08	·70	1·91	60½	77·30	46·77	11·90	7·20
½ of 7 & ½ of 8 ...					Used for seed and other purposes.						
9 & ½ of 8 ...		352½	20·10	70·90	·80	2·82	80	61·90	49·52	18·87	15·096
10, 11 & ½ of 12 ...	1	373¾	20·65	77·18	·45	1·68	79	81·25	64·19	7·57	5·98
	2	372¼	20·70	77·16	·52	1·94	80	81·10	64·88	7·69	6·15
13 & ½ of 12 ...	1	267¼	19·75	52·88	·53	1·42	52¼	83·50	43·63	7·57	3·96
	2	269	19·80	53·40	·51	1·37	54¼	83·40	45·24	5·68	3·08
Total ...	...	3395	...	687·95	...	18·83	714	...	570·79	...	60·126
Average ...	...	...	20·32	...	0·56	...	...	79·94	...	8·42	...

TABLE No. I—*contd.*

Weight and composition of juice and jaggory (or massecuite) obtained from sugar-cane plots. Plot IX.

Rows	Pan	Juice					Jaggory or Massecuite				
		Weight	Sucrose		Glucose		weight	Sucrose		Glucose	
		lbs.	%	Total weight lbs.	%	Total weight lbs.	lbs.	%	Total weight lbs.	%	Total weight lbs.
1 and ½ of 2	1	280	19·85	55·58	·41	1·15	55	85·00	46·75	5·49	3·02
	2	281½	20·00	56·30	·46	1·29	57½	81·70	46·93	7·46	4·29
3, 4 and ½ of 2	1	444¾	20·40	90·73	·51	2·27	87	76·60	66·64	10·90	9·48
	2	352½	20·30	71·56	·44	1·55	72	86·40	62·21	4·50	3·24
5 and ½ of 6	1	283¾	19·65	55·66	1·16	3·29	30	78·00	23·40	10·80	3·24
	2	...	...	...	...	...	26	67·65	17·59	12·13	3·15
½ of 6 and ½ of 7	1	Used for seed and other purposes.									
8, 9 and ½ 7	1	369½	20·40	75·33	·60	2·22	75	78·00	58·50	9·20	6·90
	2	297½	20·35	60·49	·51	1.52	68	85·15	57·90	5·95	4·0
10, 11 and ½ of 12	1	401¾	20·40	81·96	·32	1·29	81½	85·20	69·65	5·21	4·26
	2	365¼	20·55	75·05	·35	1·28	76½	83·85	64·15	6·17	4·72
13 and ½ of 12	1	287	19·75	56·68	·31	0·89	59	89·10	52·57	2·53	1·49
	2	289½	20·00	57·90	·31	·90	59	88·60	52·27	3·70	2·18
Total ...	...	3,652	...	737·25	...	17·65	746¾	...	618·61	...	50·02
Average ...	...	...	20·19	...	0·48	...	...	82·84	...	6·70	...

Weight and composition of juice and jaggory (or massecuite) obtained from sugar-cane plots. Plot X.

1 and ½ of 2	1	274	20·00	54·80	·42	1·15	53¾	...	...	2·90	1·56
	2	204¾	20·05	41·05	·50	1·02	37½	92·00	34·73	3·01	1·13
3, 4 and ½ of 2	1	334	21·50	71·81	·32	1·30	64½	85·50	55·15	5·10	3·29
	2	193	21·30	41·11	·39	0·75	40¼	84·00	33·81	4·24	1·71
5 to 9 southern third	...	118	21·05	24·84	·19	0·22	23¼	78·60	18·27	5·37	1·25
5 to 9 middle third	...	440	21·65	95·26	·38	1·67	103	78·60	80·96	7·28	7·50
5 to 9 northern third	1	360¼	20·10	72·41	·68	2·45	84	66·60	55·94	12·20	10·25
	2	217¼	20·25	43·99	·70	1·52	47¾	76·10	36·34	8·77	4·19
10, 11 and ½ of 12	1	392	21·40	83·89	·46	1·80	86	81·80	70·35	6·65	5·89
	2	296	21·45	63·49	·50	1·48	64¼	85·20	54·74	4·60	3·08
13 and ½ of 12	1	291½	20·60	60·05	·49	1·43	63⅜	84·30	53·74	5·88	3·75
	2	286½	20·70	59·25	·46	1·32	62½	83·30	52·06	7·04	4·40
Total ...	...	3407	...	711·95	...	16·11	730¾	...	546·09	...	48·00
Average ...	...	...	20·90	...	0·47	...	...	74·73	...	6·57	...

TABLE No. I--*contd.*

Weight and composition of juice and jaggory (or massecuite) obtained from sugar-cane plots. Plot XI.

Rows	Pan	Juice					Jaggory or massecuite				
		Weight	Sucrose		Glucose		Weight	Sucrose		Glucose	
		lbs	%	Total weight lbs	%	Total weight lbs	lbs	%	Total weight lbs.	%	Total weight lbs
1 and ½ of 2	1	284½	20·57	58·47	·41	1·17	49½	84·9	42·03	3·90	1·93
	2	229¾	21·10	48·37	·41	0·94	44¾	88·2	39·47	2·94	1·31
3, 4 and ½ of 2	1	288½	21·05	60·73	·39	1·13	62	85·1	52·76	4·63	2·87
	2	245	21·35	52·31	·31	0·76	54¾	83·5	45·72	5·43	2·97
5 and ½ of 6		322¾	21·20	68·42	·64	2·66	74¼	83·4	61·92	7·35	5·46
½ of 6 and ½ of 7		Used for seed and other purposes.									
8, 9 and ½ of 7	1	360¾	20·30	73·23	1·21	4·37	78½	84·8	66·57	4·70	3·69
	2	456¾	20·75	94·72	·79	3·61	92¾	77·3	71·31	10·40	9·59
10 11 and ½ of 12	1	472½	20·30	95·92	·62	2·93	102	80·8	82·42	6·48	6·61
	2	417½	20·75	86·63	·56	2·34	86	82·1	70·61	6·25	5·38
13 and ½ of 12	1	298½	20·35	60·69	·42	1·25	60	85·25	51·15	4·70	2·82
	2	255	20·40	58·14	·45	1·28	57¼	84·2	48·41	3·60	2·07
Total ...	...	3,660¼	...	757·63	...	22·44	761½	...	632·37	...	44·70
Average ...	...	...	20·70	...	0·61	...	...	83·04	...	5·87	...

Weight and composition of juice and jaggory (or massecuite) obtained from sugar-cane plots. Plot XII.

1 and ½ of 2	1	247	20·40	50·39	·33	0·82	48½	82·6	39·85	4·67	2·25
	2	247¾	20·35	50·42	·42	1·04	52½	86·2	45·04	3·90	2·04
3, 4 and ½ of 2	1	297	21·70	64·45	·32	0·95	66½	84·3	56·06	4·71	3·13
	2	217¾	21·65	47·09	·36	0·78	46½	84·7	39·39	4·42	2·06
5 and ½ of 6		297½	21·65	64·46	·61	1·82	54¼	88·9	48·23	3·78	2·05
½ of 6 and ½ of 7		Used for seed and other purposes.									
8, 9 and ½ of 7	1	356¾	21·00	74·92	·69	2·46	75¾	79·8	60·45	8·77	6·64
	2	298½	20·95	62·48	·76	2·27	65½	82·5	53·83	6·41	4·18
10, 11 and ½ of 12	1	427½	21·50	91·91	·31	1·33	88¼	81·1	71·77	7·24	6·41
	2	227	21·25	48·24	·43	0·98	45	84·5	38·03	5·74	2·58
13 and ½ of 12	1	284¾	20·75	58·98	·25	0·71	60¼	85·85	51·72	4·00	2·41
	2	268¾	20·65	55·50	·29	0·78	60	84·2	50·52	3·84	2·30
Total ...	...	3,169½	...	668·84	...	13·94	662½	...	554·89	...	36·05
Average ...	...	...	21·10	...	0·44	...	...	83·76	...	5·45	...

TABLE No. I—*contd.*

Weight and composition of juice and jaggory (or massecuite) obtained from sugarcane plots. Plot XIII.

Rows	Pan	Juice					Jaggory or massecuite				
		Weight	Sucrose		Glucose		Weight	Sucrose		Glucose	
		lbs.	%	Total weight lbs.	%	Total weight lbs.	lbs.	%	Total weight lbs.	%	Total weight lbs.
1 and ½ of 2 ...	1	258	20·60	53·15	·43	1·11	52⅜	85·3	45·00	4·85	2·56
	2	210½	20·95	44·10	·33	0·69	45¼	86·0	38·06	3·90	1·78
3, 4 and ½ of 2 ...	1	298⅜	21·15	63·19	·27	0·93	65½	87·2	57·12	2·90	1·90
	2	281½	21·00	59·12	·31	0·87	61⅜	86·1	53·17	4·09	2·53
5 and ½ of 6 ...	...	299⅜	21·20	63·55	·34	1·02	65⅜	76·8	50·50	10·87	7·15
½ of 6 and ½ of 7 ...	...	Used for seed and other purposes.									
8, 9 and ½ of 7 ...	1	371¼	21·75	80·75	·36	1·34	84	78·0	65·52	4·76	4·00
	2	291	21·60	63·29	·65	1·89	68⅜	75·4	51·84	6·41	4·41
10, 11 and ½ of 12 ...	1	495⅜	21·25	105·35	·43	2·13	100	85·1	85·10	3·75	3·75
	2	414	21·25	87·97	·44	1·82	86	82·9	71·29	6·25	5·37
13 and ½ of 12 ...	1	295	20·55	60·62	·31	0·91	60¼	85·7	51·63	2·40	1·4
	2	395	20·80	82·16	·34	1·34	82⅜	82·6	68·35	4·54	3·76
Total ...	...	3,610½	...	763·25	...	14·05	772⅜	...	637·58	...	38·61
Average ...	...	...	21·14	...	0·39	...	...	82·51	...	4·00	...

Weight and composition of juice and jaggory (or massecuite) obtained from sugarcane plots. Plot XIV.

1 and ½ of 2 ...	1	253½	20·95	53·11	·32	0·81	52½	85·8	45·05	3·62	1·90
	2	186½	20·95	39·07	·41	0·76	37½	88·2	33·07	2·36	0·88
3, 4 and ½ of 2 ...	1	292¼	21·00	61·37	·25	0·73	62	85·3	52·87	3·78	2·34
	2	268⅜	21·10	56·71	·26	0·70	56⅜	85·0	48·24	4·50	2·55
5 and ½ of 6 ...	...	240½	21·50	51·71	·38	0·91	47½	87·3	41·47	4·76	2·26
½ of 6 and ½ of 7 ...	...	Used for seed and other purposes.									
8, 9 and ½ of 7 ...	1	451½	21·20	95·72	·34	1·54	103⅜	74·4	77·19	9·09	10·27
	2	159⅜	21·50	34·35	·24	0·38	33½	81·7	27·37	4·09	1·37
10, 11 and ½ of 12 ...	1	298	20·95	62·43	·32	0·95	55⅜	83·9	46·77	6·66	3·71
	2	331	21·05	69·68	·30	0·99	65	82·5	53·62	6·66	4·33
13 and ½ of 12 ...	...	469	20·50	96·14	·21	0·98	102½	84·9	86·17	3·47	3·52
Total ...	...	2,950⅜	...	620·29	...	8·75	616⅜	...	511·82	...	33·13
Average ...	...	...	21·02	...	0·30	...	...	82·99	...	5·37	...

TABLE No. I—*concld.*

Weight and composition of juice and jaggory (or massecuite) obtained from sugar-cane plots. Plot XV.

Rows	Pan	Juice						Jaggory or Massecuite				
		Weight	Sucrose		Glucose		Weight	Sucrose		Glucose	
		lbs.	%	Total weight lbs.	%	Total weight lbs.	lbs.	%	Total weight lbs.	%	Total weight lbs.
1 and ½ of 2	1	261	21·00	54·81	·24	0·63	54¾	87·2	47·74	1·73	0·95
	2	229¾	20·90	48·02	·25	0·57	46½	88·1	40·97	2·08	0·97
3, 4 and ½ of 2	1	369½	21·75	80·42	·32	1·18	83½	84·0	70·14	5·74	4·79
	2	203½	21·60	43·90	·32	0·65	41¾	85·8	35·82	4·31	1·79
5 and ½ of 6	..	334½	20·75	69·36	·70	2·34	76	74·8	56·84	12·50	9·50
½ of 6 and ½ of 7	..	Used for seed and other purposes.									
8, 9 and ½ of 7	1	375½	20·90	78·43	·77	2·89	88¾	72·1	63·99	9·26	8·22
	2	359½	20·75	74·60	·89	3·20	84½	78·0	65·91	6·33	5·35
10, 11 and ½ of 12	1	449	20·75	93·17	·60	2·69	90	84·0	75·60	6·75	6·07
	2	316½	20·55	65·04	·60	1·90	62	84·0	52·08	6·94	4·30
13 and ½ of 12 ...	1	264½	21·00	55·60	·48	1·27	54¾	88·4	48·40	2·60	1·42
	2	267½	20·90	55·96	·46	1·23	55¾	87·1	48·56	3·93	2·19
Total ...	..	3450½	..	719·31	...	18·55	738½	...	606·05	..	45·55
Average	..	..	20·97	...	0·54	..	...	82·09	...	6·17	...

Weight and composition of juice and jaggory (or massecuite) obtained from sugar-cane plots. Plot XVI.

1 and ½ of 2	1	249½	21·40	51·95	·38	0·92	50½	85·8	43·33	5·00	2·53
	2	349½	21·05	73·52	·50	1·74	75½	82·1	61·78	5·88	4·42
3, 4 and ½ of 2	1	374	21·45	80·44	·25	0·94	80¾	86·8	70·09	3·40	2·75
	2	257	21·05	75·15	·39	1·39	75¾	87·1	65·98	2·39	1·81
5 and ½ of 6	..	336½	20·75	69·88	1·04	3·50	67½	82·25	55·52	7·69	5·19
½ of 6 and ½ of 7	..	Used for seed and other purposes.									
8, 9 and ½ of 7	1	380½	20·95	79·66	·70	2·66	81¼	73·05	59·35	7·46	6·06
	2	315½	21·10	66·52	·62	1·94	78¾	68·70	54·10	13·70	10·79
10, 11 and ½ of 12 ...	1	478	20·55	98·23	·61	2·92	87¾	83·65	73·10	5·32	1·69
	2	350½	20·30	71·20	·94	3·30	65¾	86·25	56·71	4·58	2·88
13 and ½ of 12	..	437	19·85	88·74	·56	2·45	86	86·50	74·39	4·80	4·13
Total	..	3,621	...	750·29	...	21·76	749½	...	614·65	...	45·25
Average ..	...	..	20·72	...	0·60	...	...	82·04	..	6·04	..

TABLE No. II.

Total yield of sugarcane plots.

Number of plot	Weight of cane	Weight of tops	Weight of juice	Weight of begasse	Mark	Extraction	Juice				Percentage of juice left in begasse	Sucrose left in begasse	Total weight of sucrose produced	Yield of total cane sugar in percent above or below the average	Number of plot
							Sucrose		Glucose						
							Percent	Weight	Percent	Weight					
	lbs.	lbs.	lbs.	lbs.	percent	percent		lbs.		lbs.		lbs.	lbs.		
1	3,635	2,120	2,330	1,198½	11·17	64·10	20·53	478·35	0·348	8·11	27·84	184	662	—24·67	1
2	4,194	2,170	2,699	1,305	10·13	64·35	20·55	554·64	0·289	7·80	28·40	219	774	—22·44	2
3	5,591	2,280	3,687	1,738	11·27	65·05	20·27	747·22	0·400	14·55	26·63	268	1,005	+0·07	3
4	5,885	2,120	3,805	1,934	10·49	64·66	20·45	778·12	0·403	15·33	27·76	299	1,077	+7·91	4
5	5,156	1,977	3,267	1,668	10·53	63·36	20·40	666·46	0·485	15·84	29·18	275	941	—5·71	5
6	5,256	2,169	3,354	1,758	10·96	63·81	20·27	679·86	0·421	14·12	28·34	269	949	—4·91	6
7	5,262	1,794	3,360	1,627	8·90	63·85	19·96	670·66	0·829	27·85	27·62	256	927	—7·11	7
8	5,606	2,043	3,655	1,748	10·06	65·20	20·32	742·70	0·556	20·32	27·51	282	1,025	+2·71	8
9	5,960	2,286	3,923	1,822	8·91	65·82	20·19	792·05	0·483	18·95	27·74	304	1,096	+9·82	9
10	5,383	1,975	3,407	1,794	11·27	63·29	20·90	712·06	0·473	16·12	28·67	286	998	0·00	10
11	5,947	1,977	3,894	1,922	10·93	65·48	20·70	806·06	0·613	23·87	27·61	307	1,113	+11·52	11
12	5,332	1,688	3,383	1,798	10·22	63·45	21·10	713·81	0·439	14·85	29·33	296	1,010	+1·20	12
13	5,948	2,194	3,853	1,927	10·23	64·78	21·14	814·52	0·389	14·99	27·84	314	1,129	+13·13	13
14	4,997	1,905	3,180	1,683	11·21	63·64	21·02	668·44	0·296	9·41	28·32	265	933	+6·51	14
15	5,726	2,074	3,656	1,904	10·93	63·85	20·97	766·66	0·540	19·74	28·31	302	1,069	+7·11	15
16	5,971	1,904	3,843	1,900	9·36	64·36	20·72	796·27	0·600	23·06	28·99	325	1,121	+12·32	16
Total ...	85,849	32,626	55,246	27,726½	166·57	1,029·05	329·49	11,377·88	7·564	264·91	450·09	4,451	15,829	.....	
Average ...	5,366	2,039	3,453	1,733	10·41	64·316	20·593	711·12	0·473	16·56	28·12	278·19 = 28·12%	989	.....	

TABLE No. III.

Loss of sugar by inversion, during boiling, when fully limed.

Plot	Juice		Fully limed jaggory and massecuite			Excess of Glucose in Jaggory, etc.	Lost in skimming, etc.		Sucrose decomposed	
	Sucrose	Glucose	Sucrose	Glucose	Glucose Ratio Glucose=1		Total sugar	Glucose		
	lbs.	lbs.	lbs.	lbs.		lbs.	lbs.	lbs.	lbs.	percent.
1	440·33	7·46	367·24	28·16	13·04	20·70	52·39	3·73	24·43	5·55
2	514·53	7·24	411·33	29·66	13·87	22·42	80·78	5·43	27·85	5·41
3	684·15	13·51	570·14	45·78	12·45	32·27	81·74	6·08	38·35	5·61
4	642·48	11·64	534·10	40·51	13·18	28·87	79·51	5·60	34·47	5·37
5	531·75	9·89	442·12	29·40	15·04	19·51	70·12	4·37	23·88	4·49
6	552·27	9·79	468·89	28·50	16·45	18·71	64·67	3·71	22·42	4·06
7	632·64	26·26	529·99	41·86	12·66	15·60	87·05	6·37	21·97	3·47
8	560·97	14·10	474·50	37·83	12·54	23·73	62·74	4·63	28.36	5·06
9	737·25	17·65	618·61	50·02	12·37	32·37	86·27	6·45	38·82	5·27
10	711·95	16·11	546·09	48·00	11·38	31·89	133·97	10·82	42·71	5·99
11	757·63	22·44	632·37	44·70	14·15	22·26	103·00	6·80	29·06	3·84
12	668·84	13·94	554·89	36·05	15·39	22·11	91·84	5·60	27·71	4·14
13	763·25	14·05	637·58	38·61	16·51	24·56	101·11	5·77	30·33	3·97
14	620·29	21·70	511·82	33·13	15·45	11·43	97·04	5·90	17·33	2·79
15	649·95	16·21	539·21	36·05	14·96	19·84	90·90	5·70	25·54	3·93
16	750·29	21·76	614·65	45·25	13·58	23·49	112·15	7·69	31·18	4·16
Total ...	10,218·57	243·75	8,453·53	613·51	.....	369·76	1,395·28	94·65	464·41	.....
Average.	.....	.....	.....	.....	13·78	.....	.....	.....	.....	4·54

TABLE No. IV.

Sugar boiled from juice treated with bhendi and soda.

No.	Juice contained		Massecuite boiled there-from contained		Total sugars lost by skimming, etc.	Ratio of glucose to sucrose in massecuite. Glucose = 1	Excess of glucose in massecuite over that in the juice	Glucose lost in skimmings	Percentage of sucrose inverted
	Sucrose lbs.	Glucose lbs.	Sucrose lbs.	Glucose lbs.					
696	77·27	2·57	55·60	16·60	7·64	3·35	14·03	1·75	20·42
747	75·40	3·25	49·80	19·76	9·09	2·52	16·51	2·58	25·33
795	70·90	2·82	49·52	15·10	9·10	3·28	12·28	2·12	20·32
Total	223·57	8·64	154·92	51·46	25·83	3·01	42·82	6·45	22·03

TABLE No. IV—*concluded.*

Sugars boiled from juice treated with bhendi and soda.

Register No. of massecuite	Percentage of massecuite obtained as first sugar	Percentage of total sucrose obtained in first sugar	Percentage of sucrose in molasses	Glucose ratio in molasses	Color test with sugars Nesler			Sugar washed with water				Sugar washed with soap-nut decoction				
					Unwashed	Washed with water	Washed with soap-nut decoction	Weight of unwashed sugar	Water used for washing		Sugar lost by washing		Weight of unwashed sugar	Decoction used for washing		Sugar lost by washing	
									lbs.	%	lbs.	%		lbs.	%	lbs.	%
704	42·0	62·33	37·67	1·51	26	40	43	8·39	1·37	16·31	0·75	8·94	7·81	1·36	17·41	0·89	11·40
748	49·4	71·80	28·20	0·83	19	61	89	25·73	7·71	29·96	1·90	7·38	5·34	2·22	41·59	0·60	11·23
800	35·2	54·52	45·48	1·38	49	93	102	7·61	1·03	13·53	0·67	8·80	10·75	1·75	16·28	0·98	9·11
Total ...	...	...	...	...	...	...	...	41·73	10·11	...	3·32	...	23·90	5·33	...	2·47	...
Average	42·2	62·88	37·12	1·24	31	65	78	13·91	3·37	19·93	1·11	8·37	7·97	1·78	25·09	0·82	10·58

TABLE NO. V.

Sugar boiled from juice fully limed.

No.	Juice		Massecuite		Total sugar lost in skimming	Ratio of glucose to sucrose in massecuite Glucose = 1	Excess of glucose in massecuite over that in juice	Glucose lost in skimming	Percentage of sucrose decomposed
	Sucrose in lbs.	Glucose in lbs.	Sucrose in lbs.	Glucose in lbs.			lbs.	bs.	
625	45·90	1·09	35·94	3·81	7·24	9·43	2·72	0·69	7·43
643 } 644 }	130·42	1·85	93·73	9·70	28·84	9·66	7·85	2·70	8·09
672	79·00	3·09	58·06	7·12	16·91	8·15	4·03	1·85	7·44
725	73·62	4·50	55·85	9·51	12·76	5·87	5·01	1·86	9·38
773	42·61	2·91	31·94	5·23	8·35	6·11	2·32	1·17	8·19
847	24·84	0·22	16·31	1·11	7·64	14·69	0·89	0·48	5·52
848	95·26	1·67	76·73	7·11	13·09	10·79	5·44	1·11	6·88
928 } 929 }	144·04	3·23	101·52	6·96	38·79	14·59	3·73	2·49	4·32
952 } 953 }	130·07	1·92	96·59	6·67	28·73	14·48	4·75	1·86	5·08
979	78·43	2·89	59·32	7·62	14·38	7·78	4·73	1·64	8·12
980	74·60	3·20	60·93	4·94	11·93	12·33	1·74	0·89	3·53
Total	918·79	26·75	686·92	69·78	188·66	9·844	43·21	16·74	6·52

TABLE No. V—*concluded.*

Sugars boiled from juice fully limed.

Number	In massecuite		In unwashed sugar		Percentage of massecuite obtained as first sugars	Percentage of sucrose obtained as first sugars	Glucose ratio in molasses	Depth of color of sugar in Nesler tube			Washed with water					Washed with soap-nut decoction				
								Unwashed	Washed with		Weight of unwashed sugar	Sugar lost in washing		Water used		Weight of unwashed sugar	Sugar lost in washing		Water used	
	Sucrose	Glucose	Sucrose	Glucose					Water	Soap-nut decoction		lbs	%	lbs	%		lbs	%	lbs	%
626	35·94	3·81	26·03	0·35	57·80	72·43	2·78	38	66	66	5·31	0·50	9·42	0·27	5·08	10·84	1·25	11·53	0·62	5·72
649	93·73	9·70	52·48	0·53	42·46	55·98	3·94	48	79	...	18·14	0·95	5·24	0·86	4·74	18·31	1·42	7·76	0·71	3·88
675	58·06	7·12	39·76	0·56	52·86	68·48	2·86	28	42	34	10·23	1·23	12·02	1·11	10·85	17·17	1·98	11·53	1·02	5·94
726	55·85	9·51	34·98	0·65	47·78	62·63	2·26	28	32	31	10·22	1·08	10·57	0·65	6·36	11·05	1·67	15·11	0·87	7·87
774	31·94	5·23	21·05	0·37	49·51	65·90	2·32	38	87	130	8·75	1·08	12·33	0·81	9·26	2·97	0·85	28·62	0·50	16·84
827	16·55	2·97	10·01	0·24	42·54	60·48	2·38	26	30	...	2·38	0·32	13·45	0·50	2·10	...	...	...	...	...
858	16·31	1·11	10·78	0·09	52·91	66·09	5·72	36	42	58	3·82	0·57	14·92	0·44	11·52	3·44	0·50	14·55	0·21	6·10
863	76·73	7·11	54·61	1·19	58·03	71·17	3·68	28	98	146	12·56	1·59	12·66	0·86	6·85	35·58	6·44	18·10	2·39	6·72
934	101·52	6·96	71·36	1·76	57·38	70·29	5·20	40	55	...	22·17	1·34	6·04	1·00	4·51	...	...	...	...	...
958	96·59	6·67	68·73	1·26	57·26	71·16	3·20	36	56	66	25·34	2·11	8·33	1·14	4·50	15·50	1·89	12·19	0·78	5·03
983	59·32	7·62	37·33	0·69	46·97	62·93	3·56	52	109	135	15·17	1·62	10·68	0·90	5·93	8·94	1·52	17·00	0·69	7·72
988	60·93	4·94	39·30	0·77	52·24	64·50	4·68	27	80	88	11·06	1·29	11·66	0·84	7·59	10·67	1·62	15·18	1·03	9·65
Average	58·62	6·062	38·87	0·705	51·48	66·003	3·55	35	64·7	83·1	12·09	1·14	9·43	0·78	6·45	13·44	1·914	14·24	0·882	6·56

TABLE No. VI.

Composition of juice from cane cut during different weeks of the harvest season.

Cane cut during the first week (25th February 1907 to 3rd March 1907.)

No. of Sample	Sucrose %	Glucose %	Total Solids %	Date when cut	No. of Sample	Sucrose %	Glucose %	Total Solids %	Date when cut
613	19·85	·30	20·32	25th February 1907	837	20·70	·46	21·38	28th February 1907
631	20·55	·18	21·12	25th February 1907	868	20·57	·41	21·25	2nd March 1907
654	20·15	·18	20·44	25th February 1907	870	21·10	·41	21·52	2nd March 1907
680	20·35	·22	20·72	26th February 1907	872	20·35	·42	21·05	28th February 1907
709	20·10	·23	21·77	28th February 1907	874	20·40	·45	21·25	25th February 1907
731	20·30	·24	21·32	28th February 1907	894	20·75	·25	21·44	28th February 1907
733	19·35	·51	20·38	2nd March 1907	896	20·65	·29	21·24	28th February 1907
753	19·85	·58	21·60	28th February 1907	912	20·55	·31	20·99	26th February 1907
755	20·25	·63	21·20	28th February 1907	914	20·80	·34	21·27	26th February 1907
757	19·25	·57	20·31	2nd March 1907	938	20·50	·21	20·98	26th February 1907
759	19·85	·54	20·60	2nd March 1907	963	21·00	·48	21·65	25th February 1907
779	19·50	·49	20·58	1st March 1907	965	20·90	·46	21·78	25th February 1907
781	19·90	·46	20·58	1st March 1907	993	19·85	·56	20·46	25th February 1907
783	19·75	·63	20·71	1st March 1907					
785	19·85	·51	20·91	1st March 1907					
831	20·00	·42	20·86	2nd March 1907					
833	20·05	·50	20·44	2nd March 1907	Average	20·25	0·41	21·02	
835	20·60	·49	21·58	28th February 1907					

Cane cut during the second week (4th March 1907 to 10th March 1907.)

616	20·40	.31	20·99	6th March 1907	918	20·95	·33	21·24	5th March 1907
618	20·50	·29	21·11	7th March 1907	920	21·15	·27	21·49	9th March 1907
620	20·50	.26	21·11	7th March 1907	922	21·00	·31	21·37	9th March 1907
633	19·95	·29	20·71	6th March 1907	940	20·95	·32	21·98	5th March 1907
635	20·80	·24	21·67	7th March 1907	942	20·95	·41	21·65	5th March 1907
637	20·85	.24	21·39	7th March 1907	944	21·00	·25	21·18	8th March 1907
656	20·05	.32	21·12	5th March 1907	946	21·10	·26	21·45	8th March 1907
658	19·75	·37	20·85	5th March 1907	967	21·00	·24	21·24	6th March 1907
660	20·15	·33	20·71	8th March 1907	969	20·90	·25	21·52	6th March 1907
662	20·10	·41	20·78	8th March 1907	971	21·75	·32	22·07	7th March 1907
664	20·35	·32	21·39	8th March 1907	973	21·60	·32	21·98	7th March 1907
682	20·25	·36	21·18	5th March 1907	995	21·40	·38	21·87	6th March 1907
684	20·45	·32	20·98	5th March 1907	997	21·05	·50	21·87	6th March 1907
686	20·65	·34	21·11	9th March 1907	999	21·45	·25	21·78	7th March 1907
688	20·50	·36	21·11	9th March 1907	1001	21·05	·39	21·65	7th March 1907
711	20·15	·30	20·44	4th March 1907					
713	20·75	·47	21·72	9th March 1907					
715	20·85	·39	21·52	9th March 1907					
890	20·40	·33	20·64	4th March 1907					
892	20·35	·42	20·91	4th March 1907	Average	20·76	0·33	21·37	
898	21·70	·32	22·79	9th March 1907					
900	21·65	·36	22·27	9th March 1907					
916	20·60	·43	21·31	5th March 1907					

TABLE No. VI—*contd.*

Composition of juice from cane cut during different weeks of the harvest season.

Cane cut during the third week (11-3-07 to 17-3-07)					Cane cut during the fourth week (18-3-07 to 24-3-07)				
No. of Sample	Sucrose %	Glucose %	Total Solids %	Date when cut	No. of Sample	Sucrose %	Glucose %	Total Solids %	Date when cut
690	20·80	·35	21·72	16th March 1907	622	20·75	·28	21·72	
692	20·50	·43	21·39	16th ,, 1907	639	20·45	·34	21·12	19th March 1907
717	20·95	·23	21·87	14th ,, 1907	641	20·25	·41	21·19	19th ,, 1907
719	20·75	·29	21·67	14th ,, 1907	666	20·45	·37	21·45	18th ,, 1907
735	20.40	·36	21·17	11th ,, 1907	668	20·50	·28	21·19	18th ,, 1907
737	20·25	·36	21·11	11th ,, 1907	948	20·95	·32	21·51	18th ,, 1907
739	20·50	·32	21·17	14th ,, 1907	950	21·05	·30	21·65	18th ,, 1907
741	20·50	·33	21·24	14th ,, 1907	975	20·75	·60	21·72	19th ,, 1907
761	21·00	·64	22·07	11th ,, 1907	977	20·55	·60	21·72	19th ,, 1907
763	20·95	·65	21·99	11th ,, 1907	1003	20·55	·61	21·65	20th ,, 1907
765	20·55	·64	21·53	13th ,, 1907	1005	20·30	·94	21·65	20th ,, 1907
767	20·55	·71	21·67	13th ,, 1907					
787	20·65	·45	21·24	12th ,, 1907					
789	20·70	·52	21·71	12th ,, 1907					
791	20·55	·44	21·58	13th ,, 1907	Average	20·60	0·459	21·506	
793	20·95	·49	21·71	13th ,, 1907					
839	21·50	·32	22·05	11th ,, 1907					
841	21·30	·39	22·13	11th ,, 1907					
843	21·40	·46	22·07	13th ,, 1907					
845	21·45	·50	22·27	13th ,, 1907					
876	21·05	·39	21·58	11th ,, 1907					
878	21·35	·31	21·78	11th ,, 1907					
880	20·30	·62	21·24	14th ,, 1907					
882	20·75	·56	21·85	14th ,, 1907					
902	21·50	·31	22·22	14th ,, 1907					
904	21·25	·43	21·92	14th ,, 1907					
924	21·25	·43	21·98	16th ,, 1907					
926	21.25	·44	22·05	16th ,, 1907					
verage	20·89	0·44	21·71						

TABLE No. VI—*concld.*

Composition of juice from cane cut during different weeks of the harvest season.

Cane cut during the seventh week (8-4-07 to 14-4-07)					Cane cut during the eighth week (15-4-07 to 21-4-07)				
No. of Sample	Sucrose %	Glucose %	Total Solids %	Date when cut	No. of Sample	Sucrose %	Glucose %	Total Solids %	Date when cut
624	21·05	·46	21·85	9 April 1907	694	21·10	·47	22·07	15 April 1907
643	21·25	·31	21·72	10 ,, 1907	695	20·85	·53	21·72	15 ,, 1907
644	21·15	·29	21·79	10 ,, 1907	721	20·35	·50	21·39	16 ,, 1907
670	20·85	·40	21·72	12 ,, 1907	723	20·60	·58	21·49	16 ,, 1907
671	20·75	·57	21·79	12 ,, 1907	743	21·00	·31	21.91	17 ,, 1907
647	21·05	·19	21·78	11 ,, 1907	745	20·75	·46	21·65	17 ,, 1907
848	21·65	·38	22·65	11 ,, 1907	769	20·50	·84	21·85	18 ,, 1907
849	20·10	·68	21·12	11 ,, 1907	771	16·10	2·16	18·87	18 ,, 1907
850	20·25	·70	21·19	11 ,, 1907	773	19·75	1·35	21·79	20 ,, 1907
952	21·20	·34	22·05	12 ,, 1907	795	20·10	·80	21·24	20 ,, 1907
953	21·50	·24	22·12	12 ,, 1907	796	20·50	·67	21·58	20 ,, 1907
979	20·90	·77	22·12	10 ,, 1907	798	20·60	·70	21·65	20 ,, 1907
980	20·75	·89	22·19	10 ,, 1907	884	20·30	1·21	21·78	17 ,, 1907
1007	20·95	·70	22·05	9 ,, 1907	886	20·75	·79	21·85	17 ,, 1907
1008	21·10	·62	22·05	9 ,, 1907	906	21·00	·69	22·05	16 ,, 1907
					908	20·95	·76	22·05	16 ,, 1907
					928	21·75	·36	22·47	15 ,, 1907
					929	21·60	·65	22·47	15 ,, 1907
Average	20·96	0·50	21·88		Average	20·475	·77	21·66	

TABLE No. VI—*concld.*

Composition of juice from cane cut during different weeks of the harvest season.

Cane cut during the ninth week, (22nd April 1907 to 28th April 1907).

Number of sample	Sucrose %	Glucose %	Total Solids %	Date when cut
625	20·20	·48	20·99	.....
645	19·75	·32	20·44	.....
672	19·70	·77	21·08	24th April 1907.
696	19·55	·65	20·98	Do
725	19·95	1·22	20·96	23rd April 1907.
747	19·70	·85	20·58	Do
888	21·20	·64	22·05	Do
910	21·65	·61	22·27	Do
930	21·20	·34	22·05	24th April 1907.
954	21·50	·38	22·41	Do
981	20·75	·70	22·05	25th April 1907.
1009	20·74	1·04	22·16	Do
Average ...	20·49	0·66	21·50	

TABLE No. VII.

Composition of juice from two varieties of cane planted on February 22nd 1906 and cut on different dates showing changes during ripening process.

Date of cutting	Variety No. 1			Variety No. 2		
	Sucrose %	Glucose %	Total Solids %	Sucrose %	Glucose %	Total Solids %
20th October 1906	18·35	·74	19·50	13·00	1·90	15·30
27th October 1906	17·00	·60	17·90	12·90	2·09	15·44
3rd November 1906	17·50	·74	19·08	12·30	2·13	15·02
12th November 1906	18·90	·55	20·05	14·05	1·40	16·07
19th November 1906	20·35	·32	21·10	14·50	1·61	16·77
26th November 1906	20·60	·27	21·25	14·30	1·35	16·17
3rd December 1906	20·60	·17	21·30	15·90	1·56	17·84
10th December 1906	20·95	·16	21·38	15·25	1·70	17·03
17th December 1906	20·15	·15	21·00	17·95	1·01	19·10
24th December 1906	20·75	·12	21·49	18·70	0·86	19·84
4th January 1907	20·85	·089	21·37	18·00	0·87	18·84
12th January 1907	21·25	·097	21·49	19·75	0·47	20·58
19th January 1907	21·05	·10	21·64	18·95	0·70	19·84
26th January 1907	21·40	·12	21·78	18·20	0·69	19·23
2nd February 1907	21·30	·12	21·85	...	...	...
9th February 1907	...	...	...	18·90	0·33	...
21st March 1907	20·10	·095	20·98	17·75	0·67	19·30

TABLE No. VIII.

Showing the composition of different parts of sugar cane.

Substance		Weight of Substance when cane was cut gr.	Weight when analysed gr.	Lime Cao %	Nitrogen %	Phosphoric acid %	Potash %
Tops	Juice ...	600	600	0·038	0·053	0·099	0·41
	Begasse ...	1,142	379	0·143	0·250	0·340	1·21
Green leaves ...	...	1,700	605	0·280	0·460	0·240	1·25
Dead leaves ...	...	757	706	0·390	0·048	0·096	0·41
Cane	Juice ...	4,947	4,947	0·021	0·0089	0·073	0·107
	Begasse ...	2,548	1,096	0·108	0·240	0·142	0·246

TABLE No. IX (CALCULATED).

Composition of various parts of cane in natural stage.

Substance	Cane when cut		Lime %	Nitrogen %	Phosphoric acid %	Potash %
	Weight gr.	%				
Tops	1,742	14·90	·04414	·07261	·1081	·4044
Green leaves	1,700	14·54	·09965	·16370	·0854	·4448
Dead leaves	757	6·47	·36380	.04478	·0895	3823
Cane	7,495	64·09	·02964	·04096	·0689	·1065
Total Cane ...	11,694	100·00	·06361	·06376	·0785	·2179

TABLE No. X (CALCULATED).

Weight of different parts of cane per acre and of the plant food removed by them per acre.

Substance	Weight of parts as harvested lbs.	Lime lbs.	Nitrogen lbs.	Phosphoric acid lbs.	Potash lbs.
Tops	12,988	5·73	9·43	14·04	52·52
Green leaves ...	12,674	12·63	20·77	10·82	56·37
Dead leaves	5,644	20·53	2·53	5·05	21·58
Cane	55,879	16·56	22·89	38·50	59·51
Total ...	87,185	55·45	55·62	68·41	189·98

TABLE No. XI.

Effect of cultivation on soil moisture.

Sample	Preliminary sample	Surface soil		Surface soil		Surface soil		Surface soil		Surface soil		
		Cultivated 1½ " deep	(rolled) Uncultivated	Cultivated 1½ " deep	Uncultivated	Cultivated 1½ "deep	Uncultivated	Cultivated 1½ " deep	Uncultivated	Cultivated 1½ feet deep	Cultivated 1½ " deep	Uncultivated
Date	14-10-06	1-11-06	2-11-06	14-11-06	15-11-06	28-11-06	28-11-06	15-12-06	15-12-06	20-12-06	21-12-06	21-12-06
Rainfall in inches since last sample was taken ;..... Date.....		'97		'56 6 and 7		'08 22 and 23		'10 6 and 8			'54 19 & 20	
	Water %	Water %	Water %	Water %	Water %	Water %	Water %	Water %	Water %	Water %	Water %	Water %
From surface to 1½ in. ...										8·60	8·63	7·09
,, 1½ in. to 3 in. ...	10·22	6·25	5·38	6·19	5·60	4·58	4·49	5·16	4·34	7·85	8·17	7·72
,, 3 in. to 4½ in. ...										7·67	8·02	7·58
,, 4½ in. to 6 in. ...										6·82	8·18	6·86
,, 6 in. to 7½ in. ...										7·30	10·85	8·78
,, 7½ in. to 9 in. ...	12·15	12·19	12·03	12·62	10·50	10·92	9·75	11·38	9·97			
,, 9 in. to 10½ in. ...										7·16	11·07	11·44
,, 10½ in. to 1 ft. ...												
,, 1 ft. 0 in. to 1 ft. 3 in.	14·20	12·97	13·88	13·25	12·74	12·21	12·24	11·90	12·29	9·33	11·89	11·86
,, 1 ft. 3 in. to 1 ft. 6 in.										12·44	12·33	11·54
,, 1 ft. 6 in. to 1 ft. 9 in.	14·68	12·97	14·11	12·99	12·35	12·82	12·61	12·62	12·78	12·80	12·44	11·41
,, 1 ft. 9 in. to 2 ft. 0 in.										12·88	12·58	11·99
,, 2 ft. 0 in. to 2 ft. 3 in.	14·72	13·78	13·80	12·77	12·88	13·12	12·97	12·78	13·17	12·65	12·43	12·92
,, 2 ft. 3 in. to 2 ft. 6 in.										13·06	12·17	11·95
,, 2 ft. 6 in. to 2 ft. 9 in.	14·60	12·61	13·33	13·25	13·07	13·10	13·01	13·09	13·30	12·14	11·61	13·00
,, 2 ft. 9 in. to 3 ft. 0 in.										12·67	11·04	13·27
,, 3 ft. 0 in. to 3 ft. 3 in.	14·55	13·42	13·40	13·89	13·33	13·37	13·13	13·65	12·88	13·21	11·79	13·47
,, 3 ft. 3 in. to 3 ft. 6 in.												
,, 3 ft. 6 in. to 3 ft. 9 in.	14·77	13·42	13·28	13·75	13·52	13·84	13·12	13·42	13·00	13·18	11·96	12·59
,, 3 ft. 9 in. to 4 ft 0 in.												
,, 4 ft. 0 in. to 4 ft. 3 in.	14·67	13·84	13·86	13·21	12·91	13·58	12·74	13·67	12·50	13·14	12·14	13·00
,, 4 ft. 3 in. to 4 ft. 6 in.												
,, 4 ft. 6 in. to 4 ft. 9 in.	15·02	13·86	13·52	13·58	13·14	13·25	12·87	13·33	12·90	13·16	12·41	13·07
,, 4 ft. 9 in. to 5 ft. 0 in.												
,, 5 ft. 0 in. to 5 ft. 3 in.	14·85	13·93	13·45	13·29	12·98	13·52	13·06	13·46	12·89	12·64	12·67	12·98
,, 5 ft. 3 in. to 5 ft. 6 in.												
,, 5 ft. 6 in. to 5 ft. 9 in.	14·69	...	13·57	13·16	12·98	13·24	12·91	12·99	12·90	11·68	12·96	13·56
,, 5 ft. 9 in. to 6 ft. 0 in.												

TABLE No. XI—*contd.*

Effect of cultivation on soil moisture.

Sample	Surface soil			Surface soil			Surface soil			
	Cultivated 1½ feet deep	Cultivated 1½ inches deep	Uncultivated	Cultivated 1½ feet deep	Cultivated 1½ inches deep	Uncultivated	Under Bengal gram	Cultivated 1½ feet deep	Cultivated 1½ inches deep	Uncultivated
Date	4th Jan. 07	3rd Jan. 07	3rd Jan. 07	18th Jan. 07	17th Jan. 07	17th Jan. 07	5th Feb. 07	4th Feb. 07	4th Feb. 07	6th Feb. 07
Rainfall since last sample was taken	·51				·95					
Date	21, 28, 29 & 31				10 & 11					
	Water %	Water %	Water %	Water %	Water %	Water %	Water %	Water %	Water %	Water %
From surface to 1½″	6·06	4·14	2·70	2·84	4·49	2·43	1·02	1·77	1·92	1·60
,, 1½″ ,, 3″	4·72	5·54	5·43	7·52	6·69	5·28	2·47	4·81	4·54	2·93
,, 3″ ,, 4½″	5·99	7·28	6·37	8·66	7·39	6·50	3·92	4·95	5·56	3·90
,, 4½″ ,, 6″	5·36	6·92	6·24	7·56	9·00	7·07	2·96	6 31	6·82	4·56
,, 6″ ,, 7½″	7·74	10·79	8·15	10·09	11·84	9·68	3·85	7.62	8·51	7·76
,, 7½″ ,, 9″							6·59			
,, 9″ ,, 10½″	9·94	11·72	11·56	13·16	11·88	11·65	8·71	8·79	9·04 Stones	9·17
,, 10½″ ,, 1 feet										
,, 1 feet ,, 1′3″	11·58	12·16	11·77	13·25	11·88	11·66	8·98	11·58	10·82	10·04
,, 1′3″ ,, 1′6″	12·45	12·27	11·67	12·33	11·97	12·11	9·01	12·70	12·44	10·24
,, 1′6″ ,, 1′9″	12·07	11·36	11·80	11·54	12.53	12·65	8·30	12·12	12·89	11·57
,, 1′9″ ,, 2′0″	12·60	12·31	12·09	12·43	12·63	12·30	8·54	12·19	12·37	11·89
,, 2′0″ ,, 2′3″	12·54	12·57	12·44	12·60	12·80	12·62	9·46	11·62	12·46	11·80
,, 2′3″ ,, 2′6″	12·84	12·92	12·00	12·85	13·03	12·32	8·91	12·11	12·66	11·94
,, 2′6″ ,, 2′9″	13·24	12·18	12·28	12·83	12·87	11·64	9·16	12·39	12·77	12·06
,, 2′9″ ,, 3′0″	13·20	12·90	12·50	13·06	12·99	12·57	8·94	12·45	12·86	11·83
,, 3′0″ ,, 3′3″	12·84	12·68	13·04	13·20	12·93	13·05	8·75	13·04	13·08	11·91
,, 3′3″ ,, 3′6″										
,, 3′6″ ,, 3′9″	.....	13·41	12.67	12·83	13·05	12·64	9·36	12·93	12·47	12·52
,, 3′9″ ,, 4′0″							9·09			
,, 4′0″ ,, 4′3″	13·12	13·39	12·89	.....	12·67	12·61	9·63	12·94	12·90	12·82
,, 4′3″ ,, 4′6″							9·88		13·01	
,, 4′6″ ,, 4′9″	13·24	12·15	12·97	13·87	13·23	12·27	10·59	13·09	12·95	12·94
,, 4′9″ ,, 5′0″							10·40			
,, 5′0″ ,, 5′3″	12·74	12·98	13·23	.....	13·04	12·15	11·48	12·13	12·56	12·40
,, 5′3″ ,, 5′6″							10·80			
,, 5′6″ ,, 5′9″	12·15	12·50	12·97	12·07 Gravelly	12·58	12·91	10·11	11·23	12·85	12·83
,, 5′9″ ,, 6′0″										

TABLE No. XII.

Rainfall Register from October 1906—March 1907.

Date		Rainfall in inches	Date		Rainfall in inches
October	3rd	1·48	Between 3rd and 4th borings	...	0·08
	5th	0·28			
	6th	0·56	December	6th	0·01
	7th	0·43		8th	0·09
	8th	0·75			
	9th	0·28	Between 4th and 5th borings	...	0·10
	10th	0·14			
	11th	0·53	December	19th	0·02
	12th	0·99		20th	0·52
	14th	0·44		21st	0·01
Before 1st boring	...	5·88	Between 5th and 6th borings	...	0·55
October	15th	0·05	December	28th	0·08
	17th	0·27		29th	0·29
	18th	0·07		31st	0·13
	20th	0·06			
	25th	0·02	Between 6th and 7th borings	...	0·50
	26th	0·06			
			January	10th	0·80
Between 1st and 2nd borings	...	0·53		11th	0·15
November	6th	0·39	Between 7th and 8th borings	...	0·95
	7th	0·17			
	15th	0·01	Between 8th and 9th borings	...	0·00
Between 2nd and 3rd borings	...	0·57			
November	22nd	0·03			
	23rd	0·05			

TABLE No. XIII.
Composition of "Famine Foods."

No.	Local name	Moisture %	Nitrogen. %	Proteids. %	Fat %	Crude fibre. %	Carbohydrates. %	Ash insoluble in weak acids or alkalies. %
137	Navare Genasu...	5·76	0·86	5·37	0·71	4·45	79·80	0·93
138	Sal do	11·11	1·31	8·18	0·76	4·64	74·40	0·97
139	Karane do	8·93	1·58	9·87	1·43	14·30	65·10	1·00
140	Kall do	8·10	1·08	6·75	1·76	5·28	77·85	0·68
141	Akki do	8·26	1·09	6·81	1·60	4·36	79·86	0·32
142	Adavi do	8·96	1·17	7·31	1·76	3·48	78·80	0·46
143	Nose Gadde	10·28	1·79	11·18	1·12	2·62	74·22	0·56
144	Kathale Gadde	7·96	0·67	4·18	0·45	3·01	84·30	0·06
146	Bettada Eachal Hannu (wild date)	9·24	0·63	3·93	0.75	10·29	74·77	0·90
148	Kare soppu	6·77	2·27	14·13	3·14	15·14	59·53	...
149	Kesavina Gaddé	6·16	0·91	5·68	0·92	9.99	77·23	...
150	Maragenasu (Tapioca)	3·14	0·60	3·75	1·91	7·05	83·75	...
151	Attikayi	10·85	1·21	7·56	4·10	15·45	61·66	0·36
152	Yele Genasu	6·64	1·48	9·25	2·03	14·81	65·32	1·98
153	Honagone soppu	6·10	3·07	19·18	1·72	15·63	53·47	...
159	Bidaru Kalalay...	10·02	4·23	26·43	1·48	12·77	49·32	...
162	Noreu Genasu	5·70	0·80	5·00	1·90	10·57	74·19	2·60
164	Byle do	9·89	0·72	4·50	2·06	10·67	65·73	3·10
169	Pine apple fruits	9·72	1·08	6·75	0·34	8·58	74·26	0·20
170	Gudugudi fruits	8·54	0·51	3·18	0·54	8·61	78·41	0·60
171	Chelvi Genasu	5·68	1·65	10·31	0·64	9·91	71 87	1·50

TABLE No. XIV.
"Famine Foods" (*partially analysed*).

No.	Local name	Nitrogen. %	No.	Local name	Nitrogen. %
134	Gutti Gaddé	2·86	178	Kadu Nugge soppu...	2·18
135	Beudle soppu	1·95	179	Kadu Haruve soppu	1·51
136	Devadari soppu	1·83	186	Navale bhatta	1·64
147	Jambu-Nérale kayi	0·82	209	Hedige Genasu	2·11
154	Vishnukranthi soppu	2·22	210	Bagani pith	0·06
155	Hunisé beeja	2·34	216	Anne soppu	2·44
156	Thangadi huvu	1·47	224	Bidaru Akki	1·80
157	Kesavina dantu	1·05	226	Pundi soppu	3·33
158	Chandra Malligé Gaddé	1·03	230	Akki thowdu	1·57
160	Vondalaga soppu	1·53	253	Bongari kayi	0·69
161	Kondal Genasu	0·82	254	Chagachi soppu	2·32
163	Seebe Gaddé	1·12	259	Kayi Genasu	1·27
165	Bikki kayi	0·68	268	Kadu Ragi	2·65
166	Makali béru	0·40	270	Soft stem of country date	0·84
167	Goni hannu	1·16	271	Babul seeds	6·06
168	Alada hannu	0·92	273	Lotus roots	1·77
172	Kavali Genasu	1·37	277	Deva Genasu	1·18
173	Noori do	1·63	323	Agase soppu	4·67
174	Noolina do	1·61	375	Navare hannu	2·00
175	Godirasanidha Gaddé Hittu	0·05	349	Tnpre do	0·26
176	Kannay soppu	2·70	385	Seege soppu	4·97
177	Marakesavina Gaddé...	1·34	386	Hunisé soppu	1·83

TABLE No. XV.

List of "Famine Foods."

No.	Local name	English name	Botanical name	District	Remarks
134	Gutti gadde ...	.....	.....	Kolar	The tubers are boiled with dhal and eaten mixed with salt. Delicate persons are said to develop rheumatism if they eat this food.
135	Bendli soppu ...	Bastard sandal.	Erythroxylon monogynum ...	,,	The leaves are dried and boiled in water with salt.
136	Devadari or gyadari soppu.	Commonly known as the beal tree	Ægle marmelos.	,,	The leaves are dried, ground, mixed with Ragi flour and cooked.
137	Navare genasu ...	.....	.....	Mysore	Eaten fried or boiled, said to produce cough.
138	Sal genasu ...	.....	.....	,,	
139	Karane genasu ...	.....	.....	,,	
140	Kall genasu ...	.....	.....	,,	
141	Akki genasu ...	.....	.....	,,	
142	Adavi genasu ...	Species of yams.	Dioscorea ...	Bangalore.	
143	Nose gadde ...	.....	.....	Kolar	The tuber is ground, mixed with tamarind and made into cakes.
144	Kathale gadde ...	Aloe roots...	Agave Americana.	,,	The soft portion is cut into pieces, boiled with a paste of tamarind, dried in the sun and eaten.
145	Eachal hannu ...	Date fruits.	Phoenix sylvestrius.	,,	
146	Bettada Eachal hannu.	Do ,, ...	Phoenix farinifera.	,,	
147	Jambu Neralay kayi...	.....	Eugenia jambulona. Var. obtusifolia.	,,	
148	Kare soppu ...	.....	Canthium parviflorum.	,,	
149	Kesavina gadde ...	.....	Alacacia antiquorum.	Tumkur.	
150	Mara genasu ...	Tapioca ...	Manihot utillisima	,,	
151	Atti kayi ...	Country fig.	Ficus glomerata.	,,	Cooked and eaten; or dried ground and mixed with Ragi flour and boiled and eaten.
152	Yele genasu ...	.....	Dioscorea species.	Mysore	
153	Honagonne soppu ...	.....	Alternanthera sessilis.	Kolar	
154	Vishnukranthi soppu.	.....	Evolvulus alsinoides.	,,	
155	Hunise beeja ...	Tamarind seeds.	.....	,,	Seeds fried, husks removed, the cotyledons broken into pieces, boiled and eaten.
156	Thangadi huvu ...	.....	Cassia auriculata.	Tumkur	
157	Kesavina dhantu ...	.....	Alacacia antiquorum.	,,	
158	Chandramallige gadde.	.....	Mirabilis jalapa...	Hassan	
159	Bidaru kalalay ...	Bamboo shoots.	Bambusa aurundinacea.	,,	
160	Vondalaga soppu ...	.....	Hydrocotyle Asiatica.	,,	
161	Kondal genasu ...	.....	.....	,,	
162	Noren genasu ...	.....	Dioscorea aculeata.	,,	Eaten boiled.
163	Seebe gadde ...	.....	.....	,,	
164	Byle genasu ...	.....	Dioscorea species.	,,	
165	Bikki kayi ...	.....	Gardenia gummifera.	,,	
166	Makali beru ...	.....	.....	,,	

TABLE No. XV—*contd.*
List of "Famine Foods."

No.	Local name	English name	Botanical name	District	Remarks
167	Goni hannu ...	.....	Ficus Mysorensis.	Kadur	
168	Alada hannu ...	Banyan fruit.	Ficus Bengalensis.	,,	
169	Ananas hannu ...	Pine apple...	.....	Hassan	
170	Gudu gudi fruits ...	.....	Scutia Indica ...	,,	
171	Chelvi genasu ...	.....		Mysore	
172	Kavali genasu ...	.....	.....	,,	Eaten raw.
174	Noolina genasu ...	.....	.....	Mysore	
175	Goddirasanida gadde.	.....	.....	Shimoga	
176	Kannay soppu ...	.....	Commelyna communis.	Kolar	
177	Marakesavina gadde...	.....	Alocacia species.	Mysore	
178	Kadu nugge soppu ...	.....	.....	,,	
179	Kadu haruve soppu ...	.....	Embelia ribes ...	,,	
180	Koneri gadde ...	.....	.....	Hassan	
185	Ale soppu ...	.....	.....	Mysore	
186	Navale bhatta ...	.....	.....	Mysore	
209	Hedige genasu ...	Species of yams.	Dioscorea ...	Shimoga	
210	Bagani pith ...	.....	Caryota urens ...	,,	
211	Beila genasu ...	.....	.....	,,	
212	Kayi genasu ...	.....	.....	,,	Boiled and eaten.
215	Kumbha genasu ...	.....	.....	,,	
216	Anne soppu ...	.....	.....	Hassan	
219	Mullu genasu ...	.....	.....	Mysore	Boiled and eaten with or without honey.
222	Chesaka seeds ...	.....	.....	,,	Fried, ground and made into gruel; said to produce colic.
226	Poondi soppu ...	.....	.....	Hassan	
228	Bale dhantu ...	Plantain stem	.....	,,	
230	Akki thowdu ...	Rice tour ...	.....	,,	
233	Byaladakayi ...	Wood apple fruit.	.....	Mysore	
235	Bale gadde ...	Plantain root	.....	,,	
240	Chelle hannu ...	.....	.....	,,	
243	Yeesha soppu ...	.....	.....	,,	
252	Tare kayi ...	.....	Terminalia bellerica.	Kadur	
253	Bangari kayi ...	.....	Randia dumetorum.	,,	The inner fleshy portion cut and boiled with condiments.
254	Chagache soppu ...	.....	Cassia tora ...	,,	
260	Bidaru akki ...	Bambu seed or rice.	Bambusa arundinacea.	,,	Eaten like rice.
265	Myari bhatta ...	.....	.....	Shimoga	
268	Kadu ragi* ...	.....	.....	Chitaldrug	It is stated that ants store 3 to 4 seers of this under ground. People used to go in search of these antholes to collect this grain. It is ground into flour, boiled and eaten.
269	Kathale dhantu* ...	Aloe stem...	Agave Americana.	,,	* Eaten during the famine of 1876-77 in Jagalur Taluk.
270	Eachal dhantu* ...	Soft stem of country date.	.....	,,	
271	Jali beeja* ...	Babbool seeds.	Acacia Arabica ...	,,	
273	Thavaray gadde ...	Lotus root...	Nelumbium speciosum.	Tumkur	
318	Pillagala gadde ...	.....	Typa augustifolia.	Chitaldurg	The roots eaten raw or boiled. The roots of one plant said to afford food for 2 persons. Used in famine of 1876-77.

TABLE XV—*concld.*

List of "Famine Foods."

No.	Local name	English name	Botanical name	District	Remarks
323	Agase soppu ...	Agathi leaves.	Sesbania grandiflora.	Tumkur	
349	Tupre hannu ...	.....	Diosperos tupru.	,,	
375	Navare hannu ...	.....	.....	,,	
387	Amble genasu ...	.....	.....	Bangalore.	
383	Thangadi soppu ...	.....	Cassia auriculata.	,,	
385	Seege soppu ...	Soap nut leaves.	.....	,,	
386	Hunise soppu ...	Tamarind leaves.	.....	,,	
391	Solle hannu ...	.....	.....	,,	
393	Nagare hannu ...	.....	Ximenia Americana.	,,	
422	Kurdi hannu ...	.....	.....	,,	
423	Burdi hannu ...	.....	.....	,,	